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## EVALUATION OF NUCLEON-INDUCED CROSS SECTIONS ON MAGNESIUM AND SILICON ISOTOPES UP TO 3 GeV

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Nucleon-induced cross sections on magnesium isotopes, <sup>24,25,26</sup>Mg, and silicon isotopes, <sup>28,29,30</sup>Si, were evaluated for energies up to 3 GeV. The nucleon scattering cross sections were evaluated by a consistent analysis on nuclear level structure and nucleon scattering data, using a unified framework of soft-rotator model and coupled-channels approach. The scattering cross sections for silicon isotopes were re-analyzed based on two new considerations. First the silicon isotopes were assumed to be deformed nuclei having oblate shapes, second the more sophisticated form of optical potential energy dependence was used. The evaluation of the particle emissions was performed by using a nuclear model code system, GNASH code below 150 MeV and JQMD code above 150 MeV. Comparisons of present results with available experimental data and the LA150 evaluation were made.